

ABSTRACT OF THE DISCLOSURE

A motor includes a cylindrical magnet, first outer magnetic pole portions which are formed by gapping part of a cylinder from the distal end in the axial direction of the motor, and which oppose the outer circumferential surface of the magnet, second outer magnetic pole portions which are formed by gapping part of a cylinder from the distal end in the axial direction, and which oppose the outer circumferential surface of the magnet, first inner magnetic pole portions opposing the inner circumferential surface of the magnet, second inner magnetic pole portions opposing the inner circumferential surface of the magnet, a first coil which is located at a position between the first outer magnetic pole portions and the first inner magnetic pole portions in the axial direction of the magnet, and which excites the first outer magnetic pole portions, a second coil which is located between the second outer magnetic pole portions and the second inner magnetic pole portions on the side opposite the first coil in the axial direction of the magnet, and which excites the second outer magnetic pole portions, and an annular member which is in contact with the inner circumferential surface of the magnet, and which fits with at least the first inner magnetic pole portions or second inner magnetic pole portions.